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SURGICAL CASES IN HOSPITAL No. 2, NASHVILLE, TENN.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—Before leaving this beautiful town on my way to the Headquarters of Gen. Grant, I propose sketching for you some of the surgical cases of this hospital.

CASE I. *Wound of the Abdomen, Crest of the Ilium.*—John B. Edgar, private 36th Illinois regiment. Forced to retreat a few hundred yards at the battle of Stone River, December 31st, 1862, he received a bullet near the upper third of the crest of the right ilium. The ball seems to have struck the crest, and been turned slightly from its course, passing horizontally between the layers of abdominal muscle, coming out below and to the right of the umbilicus, and striking the buckle of his belt. Such is the apparent course of the ball. The patient says that *it re-bounded from the buckle, re-entered the tissues, and was afterwards cut out by a surgeon.* The bullet, which he still retains, is flattened on two sides, and at the base.

Four months have intervened, and the following is the present condition of the wound. The wound of exit, ragged and large, has entirely healed up and cicatrized. The track of the ball has closed up, with the exception of about one fourth of it next to the wound of entrance. A portion of the crest appears to be exfoliating, and the discharge is small in amount and healthy. Some tenderness remains across the lower part of the abdomen, which is painful on attempting to walk. The patient, although thin, appears to be healthy, and has a fair prospect of getting well soon.

CASE II.—James Cook, private 79th Illinois, wounded in the same battle. The bullet in this case entered the tissues near the anterior extremity of the seventh rib, on the left side, and grazing the edge of that bone, passed downwards and outwards in the direction of the crest of the ilium, making a track of about four inches. The present condition of the patient is as follows: The discharge has nearly ceased, one or two pieces of the rib have been discharged, the wound of exit has entirely healed up, and the wound of entrance is about the size of a five-cent piece.

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CASE III.—Emanuel Seitz, private 19th Ohio, occupation farmer, received a gun-shot wound in the same battle. The bullet in this case entered on the left side of the symphysis pubis, passing downwards and backwards and opening for itself a passage on the left side of the anus, forming an extraordinary variety of anal fistula, not connected, however, with the rectum. The course of the ball did not involve either the testicle or penis. The patient appears now to be in a comparatively healthy condition. The track of the ball is closed to within a few lines of each orifice. The wound of entrance is now very small, and discharges a very little healthy pus. The wound of exit is in very nearly the same condition. It gives him a good deal of pain to get up, but he is comfortable in bed. The dressing in this case was creasote ointment. The general health is good, and all the functions are performed healthily. The patient has a bullet which he says he found in his pantaloons.

CASE IV.—Martin Smith, private 24th Wisconsin, by occupation a farmer, received a wound in the above-mentioned battle, in the right thigh. The bullet entered on the front of the thigh, in the lower part of the middle third, and passing backwards and upwards, perforated the soft parts of the thigh without injury to the bone. The present condition of this patient is as follows:—The track of the ball has healed through its whole extent, and both wounds are entirely cicatrized. The flexor muscles of the thigh are contracted, so as to prevent the extension of the leg. He can, however, by standing on the ball of his foot, walk about on the limb with the assistance of a cane. In this instance, there is no paralysis, partial or general, of the extremity. The shortening of the large flexor muscles of the thigh appears to be due partly to the position of the limb during the healing of the wound, and partly to the injury received. It is supposed that he will return to duty in a short time.

Numerous superficial wounds of the thigh, in which no important nerves or vessels were wounded, might be reported, which have healed kindly and allowed the patients to return to their regiments. One of the complications attending this kind of wound sometimes, is the injury of one or both testicles, leaving a neuralgic, atrophied or ulcerated condition of these organs or their coverings. Future cases will illustrate this complication.

CASE V.—Sergeant Mahlon Peters, 18th U. S. I., received, at the above-named battle, a bullet wound in the middle and anterior portion of the thigh. The ball passed through the soft parts on the inside of the femur, and made its exit on the back and inner portion of the thigh. The wound has entirely healed up, leaving a very contracted condition of the flexor muscle of the thigh, with neuralgia of the foot, and pain on attempting to extend the limb; general emaciation of the limb has followed. The complication here seems to be an injury of the nerves. The femoral artery escaped, and the muscles were not greatly injured. This case will illustrate the dif-

ference between injuries of the four important parts of the limb, to wit—the bones, the muscles, the vessels, and the nerves. These injuries of the nerves require investigation and a proper mode of treatment. It would be better, perhaps, in some instances, where the partial destruction of the nerve results in intolerable neuralgias, to divide it entirely *above the gun-shot wound*.

CASE VI.—George Ford, private 15th Kentucky, by occupation a farmer, wounded at the Stone river battle, in the lower third of the left thigh. The ball entered on the front surface, passing through the limb and forming a wound of exit behind and towards the outside of the thigh. In this instance the bone, although not broken, is more or less injured. This patient is about 48 years old, of a nervous temperament. The wound of exit has closed entirely, while the wound of entrance remains patulous and irregular. An abscess has formed around the lower end of the femur, which empties freely through the wound of entrance by a lateral and downward pressure, which extends at present a good distance up on the inside of the thigh. Synovitis, with general inflammation of the tissues of the knee-joint, has taken place, and there is fluctuation of the inner side of the knee-joint. The patient was four days exposed on the ground of the battle-field, before medical relief was obtained. He was alternately within the lines of the enemy and our own. He is at present, however, apparently healthy and in good spirits. He tells, with animation, how, after being wounded, he crept behind a tree, and thus hidden shot an approaching "butter-nut." The prospects in this case are rather doubtful, though the delightful situation of the hospital, the general accommodations, and careful medical attention which he receives, will be all in his favor. In this instance there is no contraction of the flexor muscles of the thigh or leg. The principal injury appears to have been received by the bone, and the strong tendency to suppuration indicates the presence of a foreign body in the wound. This foreign body may have been introduced, or it may be the injured bone. During the last two weeks the treatment in this case has been to evacuate freely the abscess every day, and inject into it a solution (3 ss. to 3 i. of water) of chlorinated soda, after which the wound is dressed with simple cerate. Compresses are also applied with a circular bandage, along the course of the cavity of the abscess. Since the occurrence of the acute inflammation of the knee-joint, cold applications have been freely applied, by means of a lint syphon. Internally, the treatment has been supporting and stimulating—whiskey toddy, beef-tea, quinine and iron.

CASE VII.—*Fracture of the Tibia*.—Fred. Meyers, private 101st Ohio. In this case the bullet entered about three inches below the tubercle of the tibia, and passed out through the calf of the leg. I do not know what the previous treatment in this case has been. The present condition is as follows:—The tibia is but very partially

united, the wound of entrance still open and discharging pus freely, while the soft tissues are saturated with pus, and perforated by ulcerations. The knee-joint is not involved, nor is the ankle. The patient is a young man of about 21 years, a German, and by no means nervous or very sensitive. Dr. W., his attending surgeon, has placed the limb in a suspensory apparatus, by which the drainage from the ulcers and the dressing of the limb are very much facilitated. The treatment at present consists of creasote ointment and water dressing, alternately.

CASE VIII.—Wm. A. Haggerty, private 78th Penn. The wound in this case appears to be from without inwards, about three inches below the knee-joint, the ball passing through the posterior part of the tibia of the left leg. The patient is a young man from Greene County, Pa., a farmer. The treatment for the last month has been alternately simple cerate, creasote ointment, and cold-water dressings. No internal remedies have been used. He is doing well.

CASE IX.—Joseph Richardson, private 7th Kentucky. Gun-shot wound of both calves. In this case the bullet passed through the soft tissues of both legs, without injuring materially the nerves or bloodvessels. The bullet entered on the outside of the right leg, passing through the gastrocnemii muscles and skin, and entered the left leg, perforating that in the same way. The wound was received about the 9th of April, while on picket duty. The patient was brought to the hospital about the 12th and remained till the 22d. When he left, the wound of the left leg had entirely closed, and that of the right nearly so. With the assistance of a couple of canes he could walk about the grounds tolerably well. There was no paralysis or neuralgia of the feet. The patient was removed to a Northern hospital, and will probably recover entirely from this flesh wound.

Other cases might be given in which wounds of the leg, ankle-joint and foot have terminated favorably under the influence of conservative surgery, but space does not permit additional cases. In my next communication, I desire to speak of the treatment of ulcers and wounds by tar-water dressings, tar ointment, and other applications of tar.

Yours, &c.,

JAMES BRYAN,
Surgeon U.S.V.

PUERPERAL CONVULSIONS.

By JOSEPH MURPHY, M.D., TAUNTON.

[Communicated for the Boston Medical and Surgical Journal.]

WITHIN a comparatively short period, I have witnessed three cases of puerperal convulsions, two of them in my own practice and the third in that of a neighboring physician. The seasons in which they occurred were spring, summer and autumn; the subjects of them

healthy, well-formed women, æt. 20, presenting no signs of plethora, anæmia or œdema, in comfortable circumstances, in their first gestation at the full period. I had the opportunity of watching from the commencement the first case. The dilating process was slow, and attended with much suffering; one half of a grain of tartrate of antimony was given every fifteen minutes until nausea was produced, and seemed to facilitate the dilatations, the labor progressing satisfactorily until the head began to press upon the perinæum. The membranes at this point spontaneously ruptured, and I anticipated a speedy delivery. After a more than usually strong pain, the nurse remarked that the patient had fainted. The pulse was small and frequent, the breathing scarcely perceptible, face pale and presenting the aspect of one who had fallen into this state. This calm was followed in about a minute by a little twitching of the angle of the mouth and eyelid of the same side, upheaving of the chest, general convulsion, frothing, hissing, livid face, purple lips, strong spasm of the muscles of the neck, with suffocation apparently imminent. With great difficulty could the tongue be protected. The paroxysm lasted about two minutes, and was followed by general exhaustion and sleep. After five minutes, she awoke entirely unconscious of what had occurred. Uterine contractions commenced again, and were followed by a general convulsion. The change in the lying-in chamber was remarkable; where a few minutes before all was sunshine, now gloom and consternation spread over all. It is well that the medical mind is trained to meet such emergencies, otherwise the bystanders would be a source of weakness and distraction. Dr. Hubbard was called to my assistance, and we determined to use ether and deliver immediately. The ether was administered by Dr. H., and I applied the forceps. If there were no other praise or compensation due to the discoverer of this valuable agent than the gratitude of him who has to perform operations in midwifery, this would go far to recompense him for it. Under its influence the forceps was easily and safely applied, and slight traction, aided by uterine effort, completed delivery.

The child was healthy and active, and cried lustily. The placenta was found in the vagina, and the uterus contracted well without hæmorrhage. After the patient was made comfortable, an interval of twenty minutes elapsed, in which she slept, probably from the influence of the ether. She then awoke, and knew nothing of what had happened. I believe that she does not yet know that instruments have been used. Uterine contractions, or after-pains, commenced, and were immediately followed by a severe convulsion, which passed off like the preceding ones. Ether was used, with the apparent effect of mitigating, but not arresting the spasm. Ten grains of calomel and twenty drops of fluid extract of cannabis Indica were administered. The Indian hemp was repeated in two hours. The intervals between the convulsions became longer.

Ether was used when she awoke and showed signs of restlessness, but without averting the convulsion. Eight hours after the calomel was taken, we got her to swallow one ounce of castor oil, with one drop of croton oil. A large evacuation of the bowels took place, and she fell into a profound sleep, which lasted, with very little interruption, twenty-four hours. Convalescence was satisfactory, and there was an abundance of breast-milk. The patient has since been confined again, and had an easy labor without any unpleasant incidents.

Why was blood-letting withheld in this case, as recommended by experience and usage? Cerebral congestion, upon which puerperal convulsions have been supposed to depend, would have been relieved by it.

Convulsions do not always depend upon cerebral congestion, for we have them in traumatic tetanus, in excessive hæmorrhages, in poisoning from strychnia—so suddenly following as to preclude the inference that loss of balance of the circulation could produce them. Neither were the signs of congestion present in this case beyond the aspect of the countenance during the fit. Symptoms of exhaustion before and after, were more marked. We regarded uterine irritation as the primary cause, transmitted through the nerves of sensation to the cerebro-spinal axis, and from thence reflected by the motor ones to the muscles, thus inducing abnormal movements. To remove or mitigate this irritation, to render the sensory nerves less susceptible, to quiet this excited state of the spinal system—seemed to us to be the indications which, if fulfilled, would be most likely to arrest the convulsions. But the following cases, related by physicians of established reputation in the practice of obstetrics, demonstrate the great confidence they had in frequent and large blood-lettings in puerperal convulsions. Denman relates that a patient was bled with no apparent benefit, for the convulsions continued; but during a fit, the bandage slipped from the arm, a great quantity of blood was lost, and the convulsion ceased. This case seemed to suggest, or confirm the benefits to be derived from copious bleeding; he says fifty, sixty or seventy ounces of blood may be cautiously taken away. Hamilton says, take away forty ounces at once, and if in two hours the patient is not better, take away forty more. Gooch relates that "a little woman, aged 18, of a spare habit, was seized with pain in her head and trembling, on which she fell down senseless. I was sent for, and soon after my arrival she became convulsed. This was the first case of the kind I had ever seen, and though the patient was not of a plethoric habit, I bled her to the amount of twenty ounces. Before the bleeding was stopped she opened her eyes, and the convulsions ceased. I ordered her head to be shaved, directed cold applications to the scalp, and a dose of sulphate of magnesia, with infusion of senna to be given every three hours, until the bowels were well cleared. Notwithstanding the fa-

avorable impression made by the bleeding, which was followed by the action of the purgative, in a short time the convulsions returned, the bandage slipped off, and she lost about eight ounces of blood. The husband tied up the arm, and in great haste ran for me—without his hat, and his hands covered with blood. I went immediately and took away twenty ounces more, and the convulsions ceased, but still the patient remained insensible. I left her, directing the black dose to be continued. At 10 o'clock, at night, I went to see her again. She had, since 9 in the morning, lost forty-eight ounces of blood, and still remained much the same. I now again bled her to about thirty ounces; the convulsions ceased, and in the morning she was decidedly better; in the course of the day uterine pains came on; she was delivered of a dead child, and gradually recovered."

Dewees relates that Mrs. —, aged 26, pregnant of her first child, a large, plethoric, robust woman, was, on the 9th September, 1811, at about 5, A.M., taken with labor pains, and sent for her midwife. "Before the midwife arrived she was seized with terrible convulsions, and I was immediately sent for. The fits were frequently repeated, and were, from their extreme violence, very threatening. Her face was considerably swelled, her eyes fairly protruded from the sockets, her tongue was terribly wounded. I instantly bled her from the jugular vein more than three pints; examined her, and found labor approaching; ordered a brisk injection. Saw her two hours after; she had had several fits; pulse extremely active; labor advancing. Bled her twenty ounces; injections repeated. A stream of cold water was poured upon her head during the intervals of the fits. 11, A.M., fits not so severe, but pretty frequent; pulse still very active. Took a quart of blood; patient apparently much relieved; became more quiet. 1, P.M., she had had two or three fits; very restless; moaned every few minutes; desirous of getting from the bed; bled her twelve ounces. Examined and found the head low in the pelvis, and delivered with forceps. She had two or three fits after delivery, and remained insensible to everything for forty-eight hours. She now began to show some signs of returning sensibility, was bled twice in the interval, cold was applied to the head, and the legs were blistered. She was purged freely by senna tea; after this she gradually recovered her senses. She was left completely blind for two weeks; she then began to see imperfectly, but it was six weeks before she could discern objects. It may be not amiss to observe that the child was living." Dewees says, "This case is remarkable on account of the severity of the disease, and the large quantity of blood that was drawn in the short period of a few hours. She lost, in the first six or seven hours of her illness, one hundred and twenty ounces of blood, and about an hundred and forty ounces altogether—a quantity that might at first startle the timid or inexperienced practitioner; but when he reflects that there was a patient laboring under one of the most ferocious complaints in the whole catalogue

of human diseases; the brain threatened with immediate destruction; the patient of prodigiously full habit, one who not only neglected the kindly warning of headache, giddiness, and occasionally loss of vision, by not having recourse to bleeding—but, contrary to the advice of the midwife, fed freely, and remained long constipated—what, then, could avert the threatening consequences of this disease, but the most prompt, and the most subduing remedies? Had not the bleeding been carried to the extent it was, I really believe it would have been unavailing. Even as it was, it did not prevent temporary blindness. Her second pregnancy was not attended with any untoward circumstance."

As regards the employment of general bleeding, and all such means as tend to abate the vital power, the opinion of the profession has undergone a very important change, chiefly within the past thirty years. Notwithstanding we cannot safely reject entirely the conclusions arrived at, and the practice adopted by the experienced physicians I have just cited, it is equally difficult to prove or disprove the value of so powerful an antiphlogistic as bloodletting in the cases reported by them; but the subsequent observations of equally accurate observers show that in many cases the symptoms which have been thought heretofore to depend upon inflammation or pressure which it was needful to remove, may be the consequence of irritation alone, loss of nervous power, deficient circulation of blood within the brain, or altered qualities of this blood.

In cases of large and sudden hæmorrhages, as in childbirth, the whole system is often put into a state of seeming excitement, and the head in particular is affected with pain, throbbing and vertigo—which symptoms are best removed by such means as gradually and equably restore the circulation and nervous power. In Sir Astley Cooper's experiments, the two vertebral arteries were tied, and various forms of spasmodic and paralytic seizures took place. In children, we have express instances of a state having all the characters of coma, but which is proved by the precursory causes, as well as by medical treatment, to depend upon general feebleness of circulation and deficiency of nervous power. Prof. Bedford, of the University of New York, makes the following remarks to his class: "Well, gentlemen, you are summoned to a lady in convulsions in the progress of her pregnancy. Labor has not commenced. What is to be done? We assume that the convulsions are due to uterine irritation, and are not complicated with uræmia. If you leave this University with the conviction, too strongly impressed upon the minds of some practitioners, that the reliable remedies in puerperal convulsions are bloodletting and opium, it is reasonable to suppose that either one or other of these remedies would be recommended. Let us pause and examine this point; the examination may save you and protect your patients against the fatal consequences of stereotyped practice. Here, then, is your patient in gestation attacked by convulsions;

the instant you approach her, true to the undying instincts of routinism, you call for a bandage and basin; the blood flows, the patient faints, re-action comes on, another convulsion; you have not taken away blood enough, whispers that fatal delusion routinism; the orifice is opened, slowly the current flows, syncope follows; a feeble re-action—another convulsion, and speedily death. The practitioner who has an abiding faith in bloodletting would, if consistent, say to the disconsolate friends, Oh, if I had seen this case at the commencement, I should undoubtedly have saved that life." It would be doing Prof. Bedford an injustice to infer from these remarks that he rejects bleeding wholly in the treatment of convulsions. He afterwards states that having a due regard to the circumstances of each case, bleeding may be necessary and the best remedy we can adopt. But my object in bringing forward his remarks is to show the change which has taken place in the past and present views regarding the employment of so important a remedy in the treatment of puerperal convulsions. The circumstances under which I deem it proper to have recourse to it, will be seen from the treatment of the following case.

This case I had not an opportunity of attending from the commencement of labor. The head was distending the perinæum, and the membranes were ruptured, when I arrived; the pains were very strong and expulsive. Without any previous warning, a strong convulsion set in. The fit presented all the characteristics of an epileptic seizure. There was no time lost that could be avoided in this case. I sent for ether and forceps; had the assistance of Dr. Hubbard, and while he administered it I applied the forceps. It required more force in this case to effect extraction than in the former; the child was also very feeble, and required some effort to bring about good respiration. The placenta was retained by a strong contraction, which followed the expulsion of the child. A considerable time was allowed to elapse, with pressure upon the uterus, before attempting its removal. There was some hæmorrhage, but no convulsion. At length we considered that it ought to be removed. This was followed by a terrible convulsion. After it had subsided, the pulse was counted, and was found to be 120, small and feeble; face pale, no stertorous breathing. Ether, ext. cannabis Indica, calomel, as in the former case, and opium in addition, were administered. The convulsions recurred every half hour during the night. At seven, A.M., the breathing was labored and stertorous, and she could not be roused or made conscious. We decided to bleed. I took sixteen ounces from the arm, which was followed immediately by another fit. An enema of castor oil and turpentine was given, which caused an evacuation, and two hours elapsed without a convulsion. The calomel was repeated, and the interval between the fits increased, but they did not altogether cease for two days after delivery. I should observe that the stertorous breathing ceased after the bleed-

ing; natural sleep followed, and she awoke recognizing her friends, but entirely unconscious of everything which took place from the first convulsion. Her mind was a perfect blank for three days; convalescence was slow, but satisfactory. She has had an easy and safe labor since.

Bleeding was resorted to in this case to relieve the brain from dangerous congestion. The stertorous breathing and coma increasing, while the convulsions became less violent, induced us to apprehend such consequence. The influence of a mixture of chloroform and ether, one part of the former to three of the latter, was by the ordinary means of inhalation obtained in both cases; the severity of the fits seemed mitigated during the state of anæsthesia, but they were not arrested. During manual interference its agency was invaluable. I think, with many other physicians, that a cautious and discriminating resort to this remedy will elicit some special indication which will dispel the doubts that yet interfere with its general use.

Dr. Channing, of Boston, whose researches upon the general subject of etherization are a great acquisition, remarks that among the alleged lesions of nervous function after etherization is convulsive disease. "My attention has been particularly directed to this subject, because the disease in question forms the gravest complication of labor. I have not met with a single instance at home or abroad. So far from this, I have seen cases of most grave puerperal convulsions in which ether has been used with the best results."

Dr. Bartlett, of New Bedford, and Dr. Cabot, of Boston, have communicated cases, in which the full effect of ether was produced after bleeding with great success. Mr. Tracy, Physician to the Lying-in Hospital, Melbourne, has published several cases in which, after large and repeated bloodletting failed to arrest the fits, he had recourse to the inhalation of chloroform with the best results. He says, "I would advise the administration of chloroform in all ordinary cases of puerperal convulsions, and, when the attack is extremely violent and the patient young and plethoric, to take a little blood previous to its inhalation."

The following case, by Dr. Page, of Landport, in connection with the administration of chloroform, is interesting:—

"Feb. 14th.—A woman, about 30 years of age, in every respect healthy, and naturally of a cheerful disposition, at the full period of pregnancy with her sixth child, was suddenly seized with convulsions about midday. When I saw her, she had had seven or eight severe attacks in an hour. She was lying in a state of coma, with stertorous breathing, contracted pupils, pulse full, strong, about 80. The os uteri was rigid, without the slightest disposition to dilate, nor was there any symptom of approaching labor. She was bled to sixteen ounces. A violent fit ensued. I then kept her under the influence of chloroform for half an hour, and waited another half hour.

No fit occurred. A turpentine enema was given, and a blister was applied to the nape of the neck. At 6, P.M., she had had convulsions at intervals. At the moment of my entering the room, the child was expelled suddenly during a fit. The placenta followed at once, and the labor was complete. The patient was still insensible, with rapid convulsions. The enema operated well. I again used chloroform for half an hour. At 10, P.M., four hours after labor, the patient was very quietly sleeping; there had been no return of the convulsions.

"Feb. 15th, 8, A.M., sixteen hours after delivery, she had been in convulsions during the night. I found her, at 9, P.M., much as I left her the night before, in profound sleep. She had convulsions whilst I was present. Chloroform was again given for half an hour, after which she had no attack. The mother and child did well. She has not the slightest recollection of anything that happened during her illness."

In 1843, Simpson published a case of puerperal convulsions in connection with albuminuria. Dr. Lever, in *Guy's Hospital Reports*, contributed a valuable paper on the same subject, and from that date the dependence upon, or rather co-existence of puerperal convulsions with albuminuria has become an acknowledged fact in obstetric pathology. Dr. Frerichs holds that the mere simple and common decomposition of urea into carbonate of ammonia is the cause of albuminuria ending in convulsions and coma, as urea does not, in his opinion and according to his experiments, produce convulsions or comatose effects. But this explanation is not deemed satisfactory by physicians generally; the subject still requires more investigation. There is often a co-existence of puerperal convulsions, albuminuria and œdema, general or local; but each one of these conditions may, and has, existed irrespectively of the other. From what has been stated, it would seem reasonable to deduce the following conclusions:

1. That bleeding, under certain conditions, is followed with good results.

2. That excessive loss of blood has not prevented the recurrence of the fits.

3. That etherization is not to be used to the exclusion of blood-letting, but the evidence of its value is increasing in the ratio of its trials.

4. That delivery does not always arrest the convulsions.

5. That when the head is low in the pelvis, the forceps should be applied, and the child is generally safely delivered.

6. That introduction of the hand into the uterus occasions irritation, and is followed by a fit, which, in the opinion of many physicians, does more harm than is compensated by the benefit derived from emptying the uterus.

7. That this objection may be removed by anæsthesia, induced to its full extent, under the superintendence of an experienced assistant.

8. That favorable conditions have in most cases coincided with and followed free evacuation of the bowels.

9. That the restricted employment of bleeding, followed by the production of anæsthesia to its full extent, delivery, where circumstances permit this to be done with facility, and free evacuation of the bowels, offer the best chance of safety to mother and child in puerperal convulsions.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY FRANCIS MINOT, M.D., SECRETARY.

MARCH 23d.—*Extra-Uterine Fœtation*.—Dr. ELLIS showed the specimen, which he received from Dr. Willis, of Waltham.

The patient was 24 years of age, and had been married three years. Two years before death, she had miscarried at the third month. Dr. Willis was first called on January 4th. She then complained of intense pain in the abdomen, extending down the thighs. A vaginal examination showed the womb to be slightly depressed, and very tender. Immediate relief was afforded by raising it, and also several times afterwards. She was kept in bed the greater part of the time for four or five weeks, as the pain immediately returned on motion. An injection of tannin (forty grains to the ounce) also afforded great relief, and she was finally able to sit up several hours, but always had her dejections and passed her water while lying down. She afterwards became so costive that castor oil acted with difficulty.

At 1, P.M., March 12th, while in bed, alone in her room, she was suddenly attacked with alarming syncope. When seen by Dr. Willis, at 3½ o'clock, she was very pale, pulseless, and apparently dying. After the administration of brandy and ammonia, the pulse returned, but was very rapid. She died at 12 o'clock, eleven hours after the first symptom.

On examination, by Dr. Willis, a very large coagulum and much bloody serum were found in the peritoneal cavity. A complete ovum, containing a fœtus, was found in the pelvis. This was intact, when examined by Dr. Ellis, but separated from the uterus. The ovum appeared to lie between the Fallopian tube and the ovary. The placenta, however, was not especially connected with either, but it was difficult to state its exact boundaries, as it surrounded the ovum irregularly, instead of forming a well-defined mass. It seemed clear, from the appearance of the specimen, that it must have been attached to some parts of the pelvic wall, although the extremity of the Fallopian tube may have participated. The fœtus was well-formed, and 6½ inches in length from vertex to heel.

The uterus was 4 inches in length, and 2½ inches in breadth on a line with the Fallopian tube. The walls were six eighths of an inch in thickness, soft and changed as in pregnancy. The lining membrane was white, loose, irregular, covered with minute puncta, and from one to two lines in thickness. A thick, viscid substance obstructed the os.

The patient was in the fourth month of pregnancy.

APRIL 27th.—*Dilated Bronchus.*—Dr. C. E. WARE reported the following case.

The patient was a young woman, who had been strong and healthy. For five weeks before her entrance into the hospital she had a cough, and she had been sick with symptoms of pneumonia four days. She died two days afterwards, without very active symptoms. There was bronchial respiration in the upper part of the right lung; and below the clavicle and over the spine of the scapula of the same side there was cavernous respiration and a well-marked tympanitic resonance on percussion, from which Dr. W. had diagnosticated a cavity of some sort during the patient's life. Outside the space occupied by the bronchial respiration was a coarse crepitant r le.

At the autopsy, the lower part of the right lung was found compressed, so as not to crepitate, about a pint of purulent fluid occupying the lower part of the cavity of the chest. The remainder of the lung was hepatized, chiefly of a greyish or yellowish-white color. In the middle of the upper lobe, within perhaps an inch and a half of the apex, was a dilated bronchus, of sufficient size to admit the end of the middle finger. It formed a kind of cavity in the depth of the lung, with a red lining membrane. The parts least dilated were marked by slightly-elevated, transverse folds. The terminal cavity was traversed by smooth bands, quite short, but of considerable thickness. A very much smaller dilatation was noticed in the immediate neighborhood, but the other bronchi appeared healthy. The dilated ones were entirely surrounded by hepatized lung.

The kidneys were both very small. Their external surface was very irregular, owing to the existence of numerous, small, yellow elevations, larger than the granulations usually seen. The cortical substance was very thin, and presented the same change as externally. The cones were flattened and distorted. The adipose tissue extended along the external surface of the infundibula, far into the organ. On microscopic examination, fat globules were seen in the yellowish portions, and some were found in the tubuli. But very few of the latter were seen.

The complication of degeneration of the kidneys accounted for the suddenness of the death of the patient with so limited an amount of pulmonary disease.

APRIL 27th.—*Bright's Disease, with Hypertrophy and Valvular Disease of the Heart.*—Dr. ELLIS showed the specimens, which came from a patient of Dr. Minot. The kidneys were of the usual size; smooth externally. The cortical substance was of a yellowish-white color, and much less vascular than usual. A microscopic examination showed that the tubuli were so crowded with epithelium that they had an opaque, granular appearance. The heart was universally hypertrophied and dilated. It weighed one pound, four ounces. Upon the external surface of the right auricle and ventricle were quite large, irregular, white spots. Upon the ventricular surface of the aortic valves were soft elevations, the largest about a quarter of an inch in diameter. These appeared to be composed partly of the diseased tissue of the valve, and partly of coagulated blood. One of the valves had lost a portion of its free edge. There was some atheromatous disease of the mitral valve and of the aorta. Serum was found in the

pleuræ, pericardium and peritoneum in abnormal quantity. The lungs were somewhat œdematous.

The patient was a man, 34 years old, a hostler by occupation. He entered the Hospital April 11th, having been troubled with pain in the abdomen and diarrhœa for four months. He used spirits daily. Two months before entrance, he "took cold," and began to have cough, pain in the limbs, palpitation, dyspnœa and anasarca. He had great swelling of the face and limbs, with some ascites. The urine was scanty, albuminous, and contained granular casts of the tubuli, and a great quantity of uric acid crystals. Its specific gravity was 1010. There was a soufflé with the first sound of the heart, audible both in front and behind. Shortly after the patient's entrance, he had an eruption of purpuric spots on the abdomen and thighs. There was some cough, with viscid expectoration, which was turned black by the addition of sulphate of iron, showing the presence of gallic acid, which he was taking, but which could not be detected in his urine. The anasarca and dyspnœa increased, and the patient died in a fortnight after his entrance.

APRIL 27th.—*Excision of the Head of the Humerus.*—Dr. HODGES exhibited a head of the humerus, removed by Dr. Algernon Coolidge from a soldier in Portsmouth Grove Hospital. He was wounded at the battle of Fredericksburg by a bullet striking the front part of the shoulder, passing downwards and backwards, and emerging over the scapula. Although the neck of the bone was cut through in nearly half its thickness, there was no shattering either of the head or of the shaft. Small portions of necrosed cancellated tissue had, on several occasions, been extracted, and the operation was finally performed because of an increasing œdema and unhealthy condition of the arm. The patient's appetite and general condition were excellent, and although a few days only had elapsed since the excision, there was every reason to think that the case would terminate favorably.

Dr. Hodges availed himself of the opportunity to express his belief that the most frequent cause of a fatal result in excisions in military practice, performed on the upper extremity, where alone they were justifiable, was the period at which they were generally practised, viz., at the time of, or a few days after, the injury. The rule in vogue with regard to amputations (and which he thought was also subject to the criticism about to be made, especially as regarded those of the thigh), that they should be primary in all cases where the choice is offered, is not applicable in the case of excisions. By a primary amputation a patient is relieved of everything connected with the injury in the way of disintegrated soft parts, fractured bone, &c., which, if unremoved, might compromise his life, and is left with a smooth incised wound, a free exit for future accumulations of pus, and in the best state for transportation. An excision, on the contrary, leaves him in a condition analogous to that of a compound fracture, with a wound favoring the infiltration of matter, the formation of abscesses, as the pus gravitates to the most dependent point, and subject to constant irritation from every voluntary or involuntary movement, not to speak of that from the almost inevitable transportation. It is obvious that the patient is threatened with a harder siege than after a primary amputation. It is well known that the cases suited to conservative surgery,

are with difficulty foretold; at the outset, it is not possible to determine the exact extent of injury. By waiting till this betrays itself, till the inflammatory processes have to a certain extent limited themselves, and the patient's general system has become, as it were, accustomed to the condition induced by a severe wound, habituated to hospital confinement and diet, and tolerant of the suppuration set up, then, even if he be in a critical or exhausted state, excision may be performed with a better prospect of success than at any previous period. An immediate excision, or one undertaken when suppuration has first established itself, carries with it far greater danger than can possibly ensue from leaving the patient untouched; by a judicious delay, an operation which has proved itself fatal beyond all expectation, may be converted, in all the cases where it is admissible, to one of comparative safety. This is well illustrated in the history of six successful cases under Dr. Stearns's care, recently reported in the *Boston Medical and Surgical Journal*, all of which, with a single exception, were performed at least a month after the receipt of the injury. As a primary measure, nothing should be done beyond the extraction of the loosest fragments and foreign bodies. If this will not suffice, and the wound is such that without more decided interference life cannot be preserved, then amputation, and not excision, ought to be performed. The greater success of secondary excisions has been noticed by Langenbeck, Stromeyer and Esmarch, and it is believed that the statistics of the present war will endorse the correctness of their opinions.

Exception has been taken to the statement that a year is ordinarily required for recovery of the full use of an arm after this operation. Its correctness is fully borne out by the cases which have been observed among us. Abscesses, slow exfoliation and persistent sinuses, protract for many months the anticipated recovery.

Dr. Hodges said he had not seen in any of the cases of recovery the degree of usefulness heretofore alleged to be possessed by the subjects of this operation. Ankylosis of the elbow and of the fingers, the result of long disuse and of the extension of inflammatory processes down the arm, impair the mobility of the limb more than the loss of the attachments of the scapular muscles and the destruction of the articulation of the shoulder. It is this condition of the fore-arm, after excision of the elbow-joint (where it is more liable to occur than after that of the head of the humerus, owing to the greater proximity of the focus of inflammation to the hand), that renders that operation so much more unsuccessful than the one at the shoulder. Several of the patients whom Dr. H. had seen, from whom the head of the humerus had been removed after the Peninsula battles, still carried about with them an arm of very little service, always wearing the hand in a sling, to obviate the uncontrollable pendulum-motion of the arm, and the most successful case he had witnessed could only really use his hand when the limb was resting on a table. Of the superiority of even such a limb over any artificial substitute there could, however, be no doubt.

 THE BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON: THURSDAY, MAY 14, 1863.

MAYDAY HOLIDAY.—We confess that we were disappointed in our forebodings on consulting the table of deaths in Boston for the week ending May 9th. We anticipated a marked increase in the number of deaths of children below the age of fifteen, as an index of the real amount of disease among them consequent upon their late holiday. Mayday this year, 'tis true, was an unusually mild and tempered occasion, wanting somewhat in the keen and merciless character generally so peculiar to it, but still there was felt that cruel east wind, which blows upon Boston with a more vindictive spirit than upon any other Atlantic city, and which for months yet to come will remind her that a vast and near ocean, chilled by winter, does not yield itself so readily as its neighboring elements to the seductive voice of spring. There were hundreds of shivering young girls, half clad in white muslin, with no covering upon the head but a wreath of paper flowers, chests naked to the axillæ, arms bare, and legs unprotected save by a light pair of cotton hose as far as the knee, and above, even to the waist, nothing but thin cotton drawers, for we do not call one or two light and short skirts, set off from all contact with the body by the hoop, any protection—hundreds of these children, between the ages of four and fourteen, were to be seen marching, like processions of half-grown ballet girls, upon the yet scarcely green grass of the Common, bathed, nay soaked, in this Arctic, aerial bath. Evil results must follow a holiday so inappropriate to our climate and so insanely observed. If they are not immediately demonstrable in school-houses filled with coughing and snivelling children or little sickbeds at home, they are none the less insidiously sowing or developing the seeds of pulmonary disease, which is either to cut off the child while young or to send another weak and crippled girl into womanhood unfitted for its duties.

We were pleased, then, to see the motion before the board of the School Committee to substitute the first of June for the annual Mayday holiday. Nature has established the fact that we have no spring in this latitude. It is useless, therefore, trying longer to convince her or ourselves to the contrary, and wicked to defy her by thrusting out into a treacherous season tender children clad in thinner than summer apparel. Were the School Committee powerless to break up the custom, we really think the police should receive instruction to place in confinement for the day all children found in the streets without proper clothing. Fortunately, however, that body can easily render any day they may choose to convert into a holiday a popular occasion, and the reminiscences of no native citizen can possibly be shocked by the proposed change. As to those of foreign birth, their associations with past joys of spring upon the green soil of their Emerald Island must yield to a more tender regard for the health of their present hopes. We noticed that a writer in the *Transcript* strenuously advocated that the change should be to the last day of May instead of the first day of summer, so that all the old associations connected with the month might not be lost. We think the School Committee has done wisely,

however, in its choice, for the last week in May, "Anniversary week," is proverbially one of the most disagreeable of spring, while June is the most charming month of the year, and "then, if ever, come perfect days."

MR. GULLIVER'S HUNTERIAN ORATION.—We presume that many of our readers may have seen, in some of the English medical journals, a report of the late Hunterian oration before the College of Surgeons, by Mr. Gulliver, of blood-corpuscle fame, and have been amused at the characteristic national glorification of the British scientific lion, and the forgetfulness of all other merit therein contained. The expression of contempt for American science has become so familiar to us, that like Roebuck's recent remark before the House of Commons, that we are "an insolent and upstart race," which was received with cheers, it is now only amusing. It is not, then, because of anything novel or particularly noteworthy in Mr. Gulliver's address that we now call attention to it, but to put upon record something which really is novel and unexpected, namely, the recognition of its merits by an English journal. The London *Lancet*, in a notice of Prof. Huxley's course of lectures on the vertebrate skeleton, an extract from one of which will appear in our next week's number, thus shows up Mr. Gulliver:—

"The fame which Owen gave to the Hunterian chair of Anatomy and Physiology Huxley is well capable of maintaining. Belonging to a new school of anatomists and zoölogists, of which in this country he may claim the headship—critical, keen and inquiring—Huxley and his fellow-workers are doing much to promote the advancement of science. Skeptical of theories and unbending to authority, sometimes harshly disregarding of the services rendered by the most illustrious patriarchs of their science, it is part of their mission to destroy as well as to construct, and many of the "idols of the cave" totter beneath their vigorous blows. Although Mr. Gulliver was gravely telling his listeners the other day that with Hunter, Hewson, himself and a few English friends, the race of physiologists had died out—and that Kölliker, Hasse, Henle, Wagner and the rest were very small fry indeed, albeit some people followed a fashion in speaking highly of them—it will be seen in the course of these lectures that in anatomy as in histology our most active English workers are progressing in unison with the Germans; and that Huxley's labors go hand in hand with those of Joh. Müller, Remak, Reichert, Hallmann and Rathke—obscure individuals, of whom Mr. Gulliver may not have heard, but who have nevertheless contributed in the most important degree to the science of anatomy."

DISINFECTANTS AND THEIR APPLICATION TO THERAPEUTICS.—Conclusions from facts contained in a memoir upon this subject published in the *Archives Générales*, by O. REVEL, Professeur agrégé à la Faculté de Médecine et à l'école supérieure de Pharmacie, &c. &c.

1st, That there probably exist many kinds of putrid fermentations, varying in their causes as in their effects;

2d, That there is no general disinfectant capable of being indiscriminately used in all cases;

3d, That liquid disinfectants are always preferable to others, other things being equal, when applied in therapeutics.

In their application to this purpose regard should be paid to their

cost, the facility of their employment and the inconveniences they may cause by corroding, soiling or rendering unserviceable the linen dressings.

4th, The best disinfectant is that which possesses the following properties:—it should—A. Instantly destroy or mask bad odors; B. Absorb the liquid or gaseous products of the putrefactive or inflammatory process, remove them by washing and destroy the poisonous or irritating action of morbid liquids and mephitic gaseous products; C. Prevent the formation of new infections or mephitic products; D. Hasten the cicatrization of sores, by giving the necessary vitality for the reparation of the tissues.

5th, Chlorine, and solutions of bromine and iodine, appear to best fulfil the most important of these conditions.

6th, Chlorine, or at least the hypochlorites, by reason of the gaseous state of their active principle, ought always to be preferred when it is desired to destroy miasm and disinfect the air.

7th, The addition of odorous essences, and principally of nitro-benzine to the hypochlorites and to iodine- and bromine-water, acts both to mask the disagreeable odors and to set into immediate operation the chemical action.

8th, Tar and coal-tar preparations are able to render effectual service, but they do not possess the property, like iodine and bromine, of destroying the poisonous action of morbid products and putrefaction, or that of various kinds of virus.

9th, *Charpie carbonifère*, and especially *charpie carbonifère iodée*, may be often employed with success.

10th, Carbon, in addition to its absorbent properties, appears to exercise an action of special contact, in virtue of which it hastens the destruction of organic matters, or rather, as M. Stenhouse states, according to the experience of Turnbull and Turner, by condensing the oxygen of the air, and thus acting as spongy platinum.

11th, Metallic solutions (salts of iron, zinc, &c.), although imperfect disinfectants, suffice in a great number of cases.

12th, Physical and mechanical agents (ventilators, &c.) may be made powerful aids to chemical disinfectants.

13th, There are some causes of infection which appear to resist all treatment (ozæna, otitis, &c.).

14th, We should add, moreover, that there are causes of infection which it would be dangerous to suppress (*sueur infecte des pieds*), and the odor of which we should endeavor to mask.

One is struck with admiration on reflecting upon the processes which nature employs to disseminate, transform and reproduce organic matters; in the presence of the grandeur of these facts, we remain convinced of the exactitude of the aphorism of Lavoisier:—"Dans la nature, rien ne se perd, rien ne se crée."

M. Reveil alludes above to the so-called fœtid foot-sweat, and thus sustains a popular error both of pathology and therapeutics. Fœtid foot-sweat does not exist. The perspiration is always fresh when secreted, and any peculiar individual odor is due to specific modifications in the sebaceous matter. It is only when the sweat has undergone decomposition upon certain portions of the body peculiarly adapted to such change, as the axillæ, beneath the mammæ, between the folds of the perinæum, &c., that the fatty acids thus formed give rise to a

fœtid odor. So, too, when the feet are not frequently cleansed, and heavy coverings are worn upon them, the boot is apt to absorb the odors thus produced, and to become in turn the real offender. We have noticed this peculiarly disagreeable smell about the persons of several officers returning from the army, where thick stockings and heavy-top boots are often worn day and night without change for a considerable time. The idea of any dangerous consequences following simple cleanliness, which is the only disinfectant required, is absurd. The worst case of fœtid foot-sweat may be cured at once by casting away the stinking boots, and substituting thin stockings and light boots or shoes, and by washing the feet every day in soap and water.

BOSTON MEDICAL ASSOCIATION.—The annual meeting of the Boston Medical Association was held on Monday, May 4th, 1863, at the room of the Mass. Medical Society, 12 Temple Place. Dr. J. M. Warren was appointed Chairman. Dr. C. D. Homans was re-elected Secretary. Drs. Shurtleff, Dale, Durkee, J. M. Warren, George Hayward, Jr., Standing Committee.

Joined during the year :—Drs. T. M. Drummond, H. F. Damon, M. S. Carpenter, S. W. Bowles, E. M. Skinner, W. C. Flowers, D. K. Warren, C. C. Street, Paschal P. Ingalls.

Died during the year :—J. B. Brown, David Osgood, Robert Ware.

The following gentlemen were appointed a Committee to make the Society known to those who are entitled to become members, and to induce them to join :—Drs. J. Homans, Shurtleff, Minot, together with the Chairman and Secretary.

THE CALIFORNIA STATE LUNATIC ASYLUM.—The Report for 1862, by Dr. W. P. Tilden, alluded to in the last number of the *San Francisco Medical Press*, refers to the crowded state of the institution, which was peculiarly the case during the time of the great flood, when the outside wards of the building had two feet of water in them. The Asylum contains suitable room for only 250 patients, but had 499 crowded into it at the close of the year, 717 having been under treatment during the year. Of these last, 141 were discharged, 65 died, and 12 eloped. Of the 65 deaths, only 22 were from disease of the brain, and among these was but one female. Another asylum is needed in the State, and probably measures will soon be taken for the establishment of one.

The graduating class at the recent commencement of the Medical Department of the University of the Pacific, in San Francisco, numbered eight, two of whom were afterwards commissioned as assistant surgeons in the U. S. Volunteer Service.

TWO RECENT CASES OF OVARIOTOMY IN FRANCE.—M. Valette, of Lyons, lately performed the above-mentioned operation on a patient 38 years of age. The lady had applied to M. Valette about four years ago, and, after repeatedappings, had been brought by the disease to so low a condition that the surgeon was obliged to consent to the operation of ovariectomy, loudly demanded by the patient. The latter died soon after the large cysts were removed, and M. Valette attributes the fatal issue to the shock of the operation, as there was neither peritonitis nor hæ-

morrhage. He determines that, in his next operation, opium and stimulants shall be more largely used. The *Gazette des Hopitaux*, of the 14th of February, also states that the patient on whom M. Nélaton lately performed ovariectomy has died. No details had then transpired. M. Valette's case is fully reported in a late number of the *Gazette Hebdomadaire*.—*London Lancet*.

AVERAGE BIRTH-RATE.—In Scotland 34,443 births were registered in eight towns (Glasgow, Edinburgh, Dundee, Aberdeen, Paisley, Greenock, Leith and Perth) during the year 1862, being in the proportion of 384 births in every ten thousand of the estimated population, or one birth in every twenty-six persons. Of these, 3,424 were illegitimate. To whatever cause it may be owing, certain it is that the proportion of illegitimate births seems to be increasing year by year.

The average birth-rate in London for the last ten years gives 337 births in every ten thousand of the estimated population.—*Ibid*.

POPULATION OF SPAIN.—For the first time a general statistical review of the movement of the population of Spain has lately been published. According to this, the number of births for the past year was 571,186; of deaths, 432,067; of marriages, 126,893. The statistics fail to give the total of the population; they only record one birth in 27 inhabitants, one death in 33, one marriage in 129; according to which the total number of inhabitants would be 15,500,000.—*Ib*.

DR. GUGGENBUHL, the founder and director of the Cretin establishment in Switzerland, has just died. He is reported to have left a large fortune.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, MAY 9th, 1863.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	36	33	69
Ave. mortality of corresponding weeks for ten years, 1853—1863,	37.8	36.7	74.5
Average corrected to increased population	60	60	82.12
Death of persons above 90	0	0	0

Mortality from Prevailing Diseases.

Phthisis.	Croup.	Scar. Fev.	Pneumon.	Variola.	Dysentery.	Typ. Fever.	Diphtheria.
10	5	4	3	0	0	2	1

COMMUNICATIONS RECEIVED—Rupture of the Uterus.—Hospital Notes and Memoranda.—Chloroform in Labor.

JOURNALS RECEIVED.—Medical and Surgical Reporter, vol. x., No. 1.—Medical News and Library, May, 1863.—The Dental Cosmos, May, 1863.—American Homœopathic Review, May, 1863.—American Medical Times, vol. vi., Nos. 18 and 19.—American Druggists' Circular, May, 1863.—London Lancet, March 7, 14, 21 and 28.—American Journal of Pharmacy, May, 1863.—London Chemist and Druggist, April 15th, 1863.—Eclectic Medical Journal of Philadelphia, May, 1863.

DEATHS IN BOSTON for the week ending Saturday noon, May 9th, 69. Males, 36—Females, 33.—Accident, 3—apoplexy, 1—congestion of the brain, 2—disease of the brain, 2—bronchitis, 1—cholera infantum, 1—consumption, 10—convulsions, 4—croup, 5—cyanosis, 1—debility, 2—diarrhea, 1—diphtheria, 1—dropsy, 1—dropsy of the brain, 3—empyema, 1—erysipelas, 2—scarlet fever, 4—typhoid fever, 2—"a fit," 1—gangrene, 1—gastritis, 1—disease of the heart, 3—infantile disease, 1—intemperance, 1—disease of the kidneys, 1—laryngitis, 1—congestion of the lungs, 1—inflammation of the lungs, 3—premature birth, 2—puerperal disease, 1—rheumatism, 1—suicide, 1—unknown, 3.

Under 5 years of age, 28—between 5 and 20 years, 5—between 20 and 40 years, 17—between 40 and 60 years, 10—above 60 years, 9. Born in the United States, 44—Ireland, 18—other places, 7.